



IFWO

RAW SEQUENCE LISTING

DATE: 07/28/2004

PATENT APPLICATION: US/10/789,956

TIME: 16:46:07

Input Set : A:\She0081.app

Output Set: N:\CRF4\07282004\J789956.raw

3 <110> APPLICANT: BOSSARD, MARY J.
 4 BENTLEY, MICHAEL D.
 6 <120> TITLE OF INVENTION: POLYMER-FACTOR VIII MOIETY CONJUGATES
 8 <130> FILE REFERENCE: SHE0081.00
 10 <140> CURRENT APPLICATION NUMBER: 10/789,956
 11 <141> CURRENT FILING DATE: 2004-02-26
 13 <150> PRIOR APPLICATION NUMBER: 60/450,578
 14 <151> PRIOR FILING DATE: 2003-02-26
 16 <160> NUMBER OF SEQ ID NOS: 2
 18 <170> SOFTWARE: PatentIn Ver. 3.2
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 2351
 22 <212> TYPE: PRT
 23 <213> ORGANISM: Homo sapiens
 25 <400> SEQUENCE: 1
 26 Met Gln Ile Glu Leu Ser Thr Cys Phe Phe Leu Cys Leu Leu Arg Phe
 27 1 5 10 15
 29 Cys Phe Ser Ala Thr Arg Arg Tyr Tyr Leu Gly Ala Val Glu Leu Ser
 30 20 25 30
 32 Trp Asp Tyr Met Gln Ser Asp Leu Gly Glu Leu Pro Val Asp Ala Arg
 33 35 40 45
 35 Phe Pro Pro Arg Val Pro Lys Ser Phe Pro Phe Asn Thr Ser Val Val
 36 50 55 60
 38 Tyr Lys Lys Thr Leu Phe Val Glu Phe Thr Asp His Leu Phe Asn Ile
 39 65 70 75 80
 41 Ala Lys Pro Arg Pro Pro Trp Met Gly Leu Leu Gly Pro Thr Ile Gln
 42 85 90 95
 44 Ala Glu Val Tyr Asp Thr Val Val Ile Thr Leu Lys Asn Met Ala Ser
 45 100 105 110
 47 His Pro Val Ser Leu His Ala Val Gly Val Ser Tyr Trp Lys Ala Ser
 48 115 120 125
 50 Glu Gly Ala Glu Tyr Asp Asp Gln Thr Ser Gln Arg Glu Lys Glu Asp
 51 130 135 140
 53 Asp Lys Val Phe Pro Gly Gly Ser His Thr Tyr Val Trp Gln Val Leu
 54 145 150 155 160
 56 Lys Glu Asn Gly Pro Met Ala Ser Asp Pro Leu Cys Leu Thr Tyr Ser
 57 165 170 175
 59 Tyr Leu Ser His Val Asp Leu Val Lys Asp Leu Asn Ser Gly Leu Ile
 60 180 185 190
 62 Gly Ala Leu Leu Val Cys Arg Glu Gly Ser Leu Ala Lys Glu Lys Thr
 63 195 200 205
 65 Gln Thr Leu His Lys Phe Ile Leu Leu Phe Ala Val Phe Asp Glu Gly
 66 210 215 220

ENTERED

RAW SEQUENCE LISTING

DATE: 07/28/2004

PATENT APPLICATION: US/10/789,956

TIME: 16:46:07

Input Set : A:\She0081.app

Output Set : N:\CRF4\07282004\J789956.raw

```

68 Lys Ser Trp His Ser Glu Thr Lys Asn Ser Leu Met Gln Asp Arg Asp
69 225                230                235                240
71 Ala Ala Ser Ala Arg Ala Trp Pro Lys Met His Thr Val Asn Gly Tyr
72                245                250                255
74 Val Asn Arg Ser Leu Pro Gly Leu Ile Gly Cys His Arg Lys Ser Val
75                260                265                270
77 Tyr Trp His Val Ile Gly Met Gly Thr Thr Pro Glu Val His Ser Ile
78                275                280                285
80 Phe Leu Glu Gly His Thr Phe Leu Val Arg Asn His Arg Gln Ala Ser
81                290                295                300
83 Leu Glu Ile Ser Pro Ile Thr Phe Leu Thr Ala Gln Thr Leu Leu Met
84 305                310                315                320
86 Asp Leu Gly Gln Phe Leu Leu Phe Cys His Ile Ser Ser His Gln His
87                325                330                335
89 Asp Gly Met Glu Ala Tyr Val Lys Val Asp Ser Cys Pro Glu Glu Pro
90                340                345                350
92 Gln Leu Arg Met Lys Asn Asn Glu Glu Ala Glu Asp Tyr Asp Asp Asp
93                355                360                365
95 Leu Thr Asp Ser Glu Met Asp Val Val Arg Phe Asp Asp Asp Asn Ser
96                370                375                380
98 Pro Ser Phe Ile Gln Ile Arg Ser Val Ala Lys Lys His Pro Lys Thr
99 385                390                395                400
101 Trp Val His Tyr Ile Ala Ala Glu Glu Glu Asp Trp Asp Tyr Ala Pro
102                405                410                415
104 Leu Val Leu Ala Pro Asp Asp Arg Ser Tyr Lys Ser Gln Tyr Leu Asn
105                420                425                430
107 Asn Gly Pro Gln Arg Ile Gly Arg Lys Tyr Lys Lys Val Arg Phe Met
108                435                440                445
110 Ala Tyr Thr Asp Glu Thr Phe Lys Thr Arg Glu Ala Ile Gln His Glu
111                450                455                460
113 Ser Gly Ile Leu Gly Pro Leu Leu Tyr Gly Glu Val Gly Asp Thr Leu
114 465                470                475                480
116 Leu Ile Ile Phe Lys Asn Gln Ala Ser Arg Pro Tyr Asn Ile Tyr Pro
117                485                490                495
119 His Gly Ile Thr Asp Val Arg Pro Leu Tyr Ser Arg Arg Leu Pro Lys
120                500                505                510
122 Gly Val Lys His Leu Lys Asp Phe Pro Ile Leu Pro Gly Glu Ile Phe
123                515                520                525
125 Lys Tyr Lys Trp Thr Val Thr Val Glu Asp Gly Pro Thr Lys Ser Asp
126                530                535                540
128 Pro Arg Cys Leu Thr Arg Tyr Tyr Ser Ser Phe Val Asn Met Glu Arg
129 545                550                555                560
131 Asp Leu Ala Ser Gly Leu Ile Gly Pro Leu Leu Ile Cys Tyr Lys Glu
132                565                570                575
134 Ser Val Asp Gln Arg Gly Asn Gln Ile Met Ser Asp Lys Arg Asn Val
135                580                585                590
137 Ile Leu Phe Ser Val Phe Asp Glu Asn Arg Ser Trp Tyr Leu Thr Glu
138                595                600                605
140 Asn Ile Gln Arg Phe Leu Pro Asn Pro Ala Gly Val Gln Leu Glu Asp

```

RAW SEQUENCE LISTING

DATE: 07/28/2004

PATENT APPLICATION: US/10/789,956

TIME: 16:46:07

Input Set : A:\She0081.app

Output Set: **N:\CRF4\07282004\J789956.raw**

141	610					615					620									
143	Pro	Glu	Phe	Gln	Ala	Ser	Asn	Ile	Met	His	Ser	Ile	Asn	Gly	Tyr	Val				
144	625						630						635						640	
146	Phe	Asp	Ser	Leu	Gln	Leu	Ser	Val	Cys	Leu	His	Glu	Val	Ala	Tyr	Trp				
147						645						650						655		
149	Tyr	Ile	Leu	Ser	Ile	Gly	Ala	Gln	Thr	Asp	Phe	Leu	Ser	Val	Phe	Phe				
150						660						665						670		
152	Ser	Gly	Tyr	Thr	Phe	Lys	His	Lys	Met	Val	Tyr	Glu	Asp	Thr	Leu	Thr				
153						675						680						685		
155	Leu	Phe	Pro	Phe	Ser	Gly	Glu	Thr	Val	Phe	Met	Ser	Met	Glu	Asn	Pro				
156						690						695						700		
158	Gly	Leu	Trp	Ile	Leu	Gly	Cys	His	Asn	Ser	Asp	Phe	Arg	Asn	Arg	Gly				
159	705						710						715						720	
161	Met	Thr	Ala	Leu	Leu	Lys	Val	Ser	Ser	Cys	Asp	Lys	Asn	Thr	Gly	Asp				
162						725						730						735		
164	Tyr	Tyr	Glu	Asp	Ser	Tyr	Glu	Asp	Ile	Ser	Ala	Tyr	Leu	Leu	Ser	Lys				
165						740						745						750		
167	Asn	Asn	Ala	Ile	Glu	Pro	Arg	Ser	Phe	Ser	Gln	Asn	Ser	Arg	His	Pro				
168						755						760						765		
170	Ser	Thr	Arg	Gln	Lys	Gln	Phe	Asn	Ala	Thr	Thr	Ile	Pro	Glu	Asn	Asp				
171						770						775						780		
173	Ile	Glu	Lys	Thr	Asp	Pro	Trp	Phe	Ala	His	Arg	Thr	Pro	Met	Pro	Lys				
174	785						790						795						800	
176	Ile	Gln	Asn	Val	Ser	Ser	Ser	Asp	Leu	Leu	Met	Leu	Leu	Arg	Gln	Ser				
177						805						810						815		
179	Pro	Thr	Pro	His	Gly	Leu	Ser	Leu	Ser	Asp	Leu	Gln	Glu	Ala	Lys	Tyr				
180						820						825						830		
182	Glu	Thr	Phe	Ser	Asp	Asp	Pro	Ser	Pro	Gly	Ala	Ile	Asp	Ser	Asn	Asn				
183						835						840						845		
185	Ser	Leu	Ser	Glu	Met	Thr	His	Phe	Arg	Pro	Gln	Leu	His	His	Ser	Gly				
186						850						855						860		
188	Asp	Met	Val	Phe	Thr	Pro	Glu	Ser	Gly	Leu	Gln	Leu	Arg	Leu	Asn	Glu				
189	865						870						875						880	
191	Lys	Leu	Gly	Thr	Thr	Ala	Ala	Thr	Glu	Leu	Lys	Lys	Leu	Asp	Phe	Lys				
192						885						890						895		
194	Val	Ser	Ser	Thr	Ser	Asn	Asn	Leu	Ile	Ser	Thr	Ile	Pro	Ser	Asp	Asn				
195						900						905						910		
197	Leu	Ala	Ala	Gly	Thr	Asp	Asn	Thr	Ser	Ser	Leu	Gly	Pro	Pro	Ser	Met				
198						915						920						925		
200	Pro	Val	His	Tyr	Asp	Ser	Gln	Leu	Asp	Thr	Thr	Leu	Phe	Gly	Lys	Lys				
201						930						935						940		
203	Ser	Ser	Pro	Leu	Thr	Glu	Ser	Gly	Gly	Pro	Leu	Ser	Leu	Ser	Glu	Glu				
204	945						950						955						960	
206	Asn	Asn	Asp	Ser	Lys	Leu	Leu	Glu	Ser	Gly	Leu	Met	Asn	Ser	Gln	Glu				
207						965						970						975		
209	Ser	Ser	Trp	Gly	Lys	Asn	Val	Ser	Ser	Thr	Glu	Ser	Gly	Arg	Leu	Phe				
210						980						985						990		
212	L																			

RAW SEQUENCE LISTING

DATE: 07/28/2004

PATENT APPLICATION: US/10/789,956

TIME: 16:46:07

Input Set : A:\She0081.app

Output Set: N:\CRF4\07282004\J789956.raw

```

215 Leu Phe Lys Val Ser Ile Ser Leu Leu Lys Thr Asn Lys Thr Ser Asn
216      1010      1015      1020
218 Asn Ser Ala Thr Asn Arg Lys Thr His Ile Asp Gly Pro Ser Leu Leu
219 1025      1030      1035      1040
221 Ile Glu Asn Ser Pro Ser Val Trp Gln Asn Ile Leu Glu Ser Asp Thr
222      1045      1050      1055
224 Glu Phe Lys Lys Val Thr Pro Leu Ile His Asp Arg Met Leu Met Asp
225      1060      1065      1070
227 Lys Asn Ala Thr Ala Leu Arg Leu Asn His Met Ser Asn Lys Thr Thr
228      1075      1080      1085
230 Ser Ser Lys Asn Met Glu Met Val Gln Gln Lys Lys Glu Gly Pro Ile
231      1090      1095      1100
233 Pro Pro Asp Ala Gln Asn Pro Asp Met Ser Phe Phe Lys Met Leu Phe
234 1105      1110      1115      1120
236 Leu Pro Glu Ser Ala Arg Trp Ile Gln Arg Thr His Gly Lys Asn Ser
237      1125      1130      1135
239 Leu Asn Ser Gly Gln Gly Pro Ser Pro Lys Gln Leu Val Ser Leu Gly
240      1140      1145      1150
242 Pro Glu Lys Ser Val Glu Gly Gln Asn Phe Leu Ser Glu Lys Asn Lys
243      1155      1160      1165
245 Val Val Val Gly Lys Gly Glu Phe Thr Lys Asp Val Gly Leu Lys Glu
246      1170      1175      1180
248 Met Val Phe Pro Ser Ser Arg Asn Leu Phe Leu Thr Asn Leu Asp Asn
249 1185      1190      1195      1200
251 Leu His Glu Asn Asn Thr His Asn Gln Glu Lys Lys Ile Gln Glu Glu
252      1205      1210      1215
254 Ile Glu Lys Lys Glu Thr Leu Ile Gln Glu Asn Val Val Leu Pro Gln
255      1220      1225      1230
257 Ile His Thr Val Thr Gly Thr Lys Asn Phe Met Lys Asn Leu Phe Leu
258      1235      1240      1245
260 Leu Ser Thr Arg Gln Asn Val Glu Gly Ser Tyr Asp Gly Ala Tyr Ala
261      1250      1255      1260
263 Pro Val Leu Gln Asp Phe Arg Ser Leu Asn Asp Ser Thr Asn Arg Thr
264 1265      1270      1275      1280
266 Lys Lys His Thr Ala His Phe Ser Lys Lys Gly Glu Glu Glu Asn Leu
267      1285      1290      1295
269 Glu Gly Leu Gly Asn Gln Thr Lys Gln Ile Val Glu Lys Tyr Ala Cys
270      1300      1305      1310
272 Thr Thr Arg Ile Ser Pro Asn Thr Ser Gln Gln Asn Phe Val Thr Gln
273      1315      1320      1325
275 Arg Ser Lys Arg Ala Leu Lys Gln Phe Arg Leu Pro Leu Glu Glu Thr
276      1330      1335      1340
278 Glu Leu Glu Lys Arg Ile Ile Val Asp Asp Thr Ser Thr Gln Trp Ser
279 1345      1350      1355      1360
281 Lys Asn Met Lys His Leu Thr Pro Ser Thr Leu Thr Gln Ile Asp Tyr
282      1365      1370      1375
284 Asn Glu Lys Glu Lys Gly Ala Ile Thr Gln Ser Pro Leu Ser Asp Cys
285      1380      1385      1390
287 Leu Thr Arg Ser His Ser Ile Pro Gln Ala Asn Arg Ser Pro Leu Pro

```

RAW SEQUENCE LISTING

DATE: 07/28/2004

PATENT APPLICATION: US/10/789,956

TIME: 16:46:07

Input Set : A:\She0081.app

Output Set: N:\CRF4\07282004\J789956.raw

```

288      1395      1400      1405
290 Ile Ala Lys Val Ser Ser Phe Pro Ser Ile Arg Pro Ile Tyr Leu Thr
291      1410      1415      1420
293 Arg Val Leu Phe Gln Asp Asn Ser Ser His Leu Pro Ala Ala Ser Tyr
294 1425      1430      1435      1440
296 Arg Lys Lys Asp Ser Gly Val Gln Glu Ser Ser His Phe Leu Gln Gly
297      1445      1450      1455
299 Ala Lys Lys Asn Asn Leu Ser Leu Ala Ile Leu Thr Leu Glu Met Thr
300      1460      1465      1470
302 Gly Asp Gln Arg Glu Val Gly Ser Leu Gly Thr Ser Ala Thr Asn Ser
303      1475      1480      1485
305 Val Thr Tyr Lys Lys Val Glu Asn Thr Val Leu Pro Lys Pro Asp Leu
306      1490      1495      1500
308 Pro Lys Thr Ser Gly Lys Val Glu Leu Leu Pro Lys Val His Ile Tyr
309 1505      1510      1515      1520
311 Gln Lys Asp Leu Phe Pro Thr Glu Thr Ser Asn Gly Ser Pro Gly His
312      1525      1530      1535
314 Leu Asp Leu Val Glu Gly Ser Leu Leu Gln Gly Thr Glu Gly Ala Ile
315      1540      1545      1550
317 Lys Trp Asn Glu Ala Asn Arg Pro Gly Lys Val Pro Phe Leu Arg Val
318      1555      1560      1565
320 Ala Thr Glu Ser Ser Ala Lys Thr Pro Ser Lys Leu Leu Asp Pro Leu
321      1570      1575      1580
323 Ala Trp Asp Asn His Tyr Gly Thr Gln Ile Pro Lys Glu Glu Trp Lys
324 1585      1590      1595      1600
326 Ser Gln Glu Lys Ser Pro Glu Lys Thr Ala Phe Lys Lys Lys Asp Thr
327      1605      1610      1615
329 Ile Leu Ser Leu Asn Ala Cys Glu Ser Asn His Ala Ile Ala Ala Ile
330      1620      1625      1630
332 Asn Glu Gly Gln Asn Lys Pro Glu Ile Glu Val Thr Trp Ala Lys Gln
333      1635      1640      1645
335 Gly Arg Thr Glu Arg Leu Cys Ser Gln Asn Pro Pro Val Leu Lys Arg
336      1650      1655      1660
338 His Gln Arg Glu Ile Thr Arg Thr Thr Leu Gln Ser Asp Gln Glu Glu
339 1665      1670      1675      1680
341 Ile Asp Tyr Asp Asp Thr Ile Ser Val Glu Met Lys Lys Glu Asp Phe
342      1685      1690      1695
344 Asp Ile Tyr Asp Glu Asp Glu Asn Gln Ser Pro Arg Ser Phe Gln Lys
345      1700      1705      1710
347 Lys Thr Arg His Tyr Phe Ile Ala Ala Val Glu Arg Leu Trp Asp Tyr
348      1715      1720      1725
350 Gly Met Ser Ser Ser Pro His Val Leu Arg Asn Arg Ala Gln Ser Gly
351      1730      1735      1740
353 Ser Val Pro Gln Phe Lys Lys Val Val Phe Gln Glu Phe Thr Asp Gly
354 1745      1750      1755      1760
356 Ser Phe Thr Gln Pro Leu Tyr Arg Gly Glu Leu Asn Glu His Leu Gly
357      1765      1770      1775
359 Leu Leu Gly Pro Tyr Ile Arg Ala Glu Val Glu Asp Asn Ile Met Val
360      1780      1785      1790

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/789,956

DATE: 07/28/2004

TIME: 16:46:08

Input Set : A:\She0081.app

Output Set: N:\CRF4\07282004\J789956.raw